SORBENTS

(Includes spill clean-up materials and waste)

HAZARDS & RULES

Base Materials - Hazards & Impacts

Sorbents (absorbent material such as pigs, pillows and socks) are not hazardous unless they come into contact with hazardous materials or hazardous wastes.

Additives and Contaminants - Hazards & Impacts

As sorbents are used to clean up spills, they become contaminated with the spilled material and generally exhibit the same hazards and impacts. You should review the spilled material's material safety data sheet (MSDS) to determine the hazards associated with the material that was spilled.

Regulatory Overview

Your used sorbents and spill waste must be managed in one the following manners. The particular management option that you must follow depends on the type and extent of contamination, the quantity of contaminated sorbents generated per month, and whether the sorbents are recycled or disposed.

Note that the term "spill waste" includes sorbents as well as any contaminated soil, residue, debris, and articles from the cleanup of a spill or release of petroleum-contaminated materials. The term "petroleum-contaminated materials" includes spill waste that contains virgin or used petroleum such as: gasoline, diesel fuel, hydraulic fuel, crude or refined oils that do not contain polychlorinated biphenyls (PCBs), kerosene, and heating oils.

- **Recycling** Petroleum-Contaminated Sorbents (and/or Spill Waste) under the Used Oil Rule:
  If your sorbents are contaminated with used oil or with a mixture of oil and other fuels, the sorbents may be burned for energy recovery under the Used Oil Rule. In order to comply with the Used Oil Rule, you must properly manage your oil-contaminated sorbents (i.e., don't mix other wastes with these sorbents), and you must either recycle your sorbents or burn them for energy recovery in an approved apparatus. See the *Oil* Section in Chapter 4 for more information on the Used Oil Rule.

- **Disposing** of Contaminated Sorbents (and/or Spill Waste)
  If you cannot manage your sorbents and spill waste under the Used Oil Rule (e.g., because of contamination with a waste other than used oil or fuels), you must make a hazardous waste determination and manage them accordingly. Sorbents that exhibit hazardous waste characteristics or are contaminated with a listed hazardous waste must be managed as a hazardous waste. See Section 2.6 for information on making a hazardous waste determination.

- **Disposing** of Petroleum-Contaminated Sorbents (and/or Spill Waste)
  You should manage your oil-contaminated sorbents under the Used Oil Rule when possible. If you have a spill that results in your shop's generating petroleum-contaminated debris and you do not wish to manage the material under the Used Oil Rule, you must conduct a hazardous waste determination on the contaminated debris. Contact IDEM's Office of Land Quality, Industrial Waste Compliance Section or CTAP for assistance.

- **Disposing** of Sorbents and/or Spill Waste as a Solid Waste (i.e., with your regular trash)
  If your used sorbents are not a hazardous waste, and they do not drip or accumulate free liquids (such as in the bottom of their storage container), you may dispose of them as solid waste. Note that materials containing free liquids are prohibited from landfills. Also note that IDEM's air regulations prohibit air drying contaminated sorbents prior to disposal, and that mechanically wringing your sorbents may expose employees to the hazards inherent to the material that was spilled. Sorbents should be wrung with sufficient care to ensure safety for your employees.

MANAGEMENT RESPONSIBILITIES

Listed below are the management options you must follow. Also listed are suggested practices that you should follow in order to ease your regulatory requirements and improve the environmental health of your shop.

You Must:

- regardless of how you manage your contaminated sorbents and/or spill waste, you must:
  - not air dry contaminated sorbents to remove ignitable or toxic characteristics prior to disposal.
  - store contaminated sorbents in closed containers to prevent the evaporation of any contaminants into the air. If your sorbents are contaminated with flammable or combustible liquids, you must store them in a container meeting the requirements of the Indiana Department of Fire & Building Services. Contact the Plan Review Division for more information. [Department of Fire & Building Services]
- if you manage your petroleum-contaminated sorbents and spill waste under the Used Oil Rule, you must follow the requirements of this rule. See the *Oil* Section in Chapter 4 for the information on the Used Oil Rule.
- if you cannot manage your used sorbents and/or spill waste under the Used Oil Rule due to contamination with a waste other than used oil or fuels, you must:
  - make a hazardous waste determination on your used sorbents. If they are a hazardous waste, you must manage them accordingly (see Chapter 3.)
  - if your used sorbents or spill waste are not a hazardous waste, you must ensure that the material does not drip, contain free liquids, or result in the accumulation of free liquids (such as in the bottom of their storage container) prior to disposing of them with your regular trash.

You Should:

- manage your petroleum-contaminated sorbents and spill waste under the Used Oil Rule.
- segregate used sorbents that are a hazardous waste from other waste materials to avoid generating an increased volume of hazardous waste.
- accumulate and store hazardous sorbents in a drum that meets DOT requirements, with the DOT Class 9 hazard sticker placed on the side of the drum. When your drum is filled, label it to include the proper DOT shipping name for hazardous waste sorbents

  "RQ, Hazardous Waste, Solid, n.o.s., Class 9, NA3077, PG III."

  (Note that you must do this prior to shipping your hazardous sorbents, but are not required to meet DOT requirements while the waste is accumulating or being stored.)

You Should Consider:

- purchasing sorbents sealed in porous fabric socks, pillows, or pouches that contain biomass-derived material such as cellulose or peat.

BACKGROUND ON OPTIONS TO CONSIDER

Purchasing Biomass-Derived Sorbent Material

Sorbents made from plant cellulose, such as cotton and wood fibers, are very effective in absorbing liquids. Biomass-derived sorbents have an absorbency ratio of 4:1 when compared to most alternatives. The absorbency ratio is five times greater than clay.